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(12) United States Patent

Olde Riekerink et al.

(54) METHOD FOR MANUFACTURING
MICROFLUIDIC CHIPS, DEVICE FOR
FUNCTIONALIZING MICROFLUIDIC
CHIPS, MICROFLUIDIC CHIP AND DEVICE
FOR HOLDING A MICROFLUIDIC CHIP

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CPC **B01L 3/502707** (2013.01); **B81C 1/00206** (2013.01); **B01J** 2219/00286 (2013.01);

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(58) Field of Classification Search

None

See application file for complete search history.

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(57) ABSTRACT

The invention relates to a method for manufacturing microfluidic chips having at least one capillary for through-flow of a fluid, comprising the steps of:

- (a) providing a starting material;
- (b) forming at least one shared capillary in the starting material, said shared capillary comprising an fluidic inlet and an fluidic outlet;
- (c) functionalizing the chips by supplying a functionalization fluid to the shared capillary; and
- (d) dividing the starting material into separate chips.

The invention further relates to a device for functionalizing microfluidic chips having at least one capillary for throughflow of a fluid, said device comprising a material holder for holding a starting material in a fixed position during functionalization, said material holder comprising at least one inlet connector for connecting at least one shared capillary formed in the starting material to a functionalization fluid supply.

The invention further relates to a microfluidic chip and a device for holding a microfluidic chip.

10 Claims, 18 Drawing Sheets

